

SPK File Naming Convention for Civil Works CADD Drawings

Scope

This document covers the File Naming Convention for Civil Works CADD Drawings only.

It does not cover the File Naming Convention for Military CADD Drawings. Refer to *SPK File Naming Convention for Military CADD Drawings* [[/CODP01L0/](#)]

Distribution

Archive Technician

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Ownership

The Lead Designer [James.B.Weir@usace.army.mil?Subject=INSP07L0-Creating Design Drawings for Civil Works Projects] is responsible for ensuring that this document is necessary and that it reflects actual practice.

References

Refer to *Architectural, Engineering, and Construction (A/E/C) CADD Standard Release 3.0* [<https://cadbim.usace.army.mil/CAD/>]

Introduction

File names shall comply with the *A/E/C CADD Standard Release 3.0* [<https://cadbim.usace.army.mil/CAD/>]. Chapter 2 of the A/E/C CADD Standard recognizes two basic categories of files, the model file and the sheet file. As defined in the Standard, a model file contains the physical components of the project, drawn at full scale, and typically represents plans, profiles and sections, etc. A sheet file is synonymous with a plotted CADD drawing and

includes selected portions or views of referenced model files. The naming convention for each file is as follows:

Table 1 - File Naming Convention

	Required	Required			
	Project Code	Discipline Designator	Type	Sequence	User
Model File	0-20 char. Tables 2 - 7	X- Table 8	XX Table 9 - 15		XXXX
Sheet File	0-20 char. Table 2 - 7	XX Table 16 - 21	X Table 2	XX	XXX
SHEET IDENTIFIER		XX	X	XX	

The sheet Identifier uses characters from the sheet file name. See **Figure 3** and **Figure 4** for how it is displayed on the sheet.

Project Codes

The Project Code is the file name assigned to the project by the Archives Technician. The format of the project code is XXXX-YY-NNNN.

- The characters XXXX comprise the CIVIL INDICATOR
- The characters YY comprise the CIVIL FILE DIVISION
- The characters NNNN are a unique sequence number assigned and recorded by the Archives Unit

The information in Tables 2 through 7 is included to aid users in interpreting project codes. The Archive Technician maintains the definitive list of Project Codes and should be consulted for any additional codes not shown here.

Civil Indicator

The CIVIL INDICATOR (CI) describes the area and/or structure where the project is located. Tables 2, 3, 4 and 5 lists the CI for the different states located in our district. CI can be either a one or two character numeric value or a four character alphanumeric value.

Table 2 Civil Indicators - California

CI	CALIFORNIA
AM	American River
AM1	Folsom Dam & Lake
BE	Bear River
CA	Calaveras River
CA1	New Hogan Dam & Lake
CA2	Farmington Dam & Lake

CI	CALIFORNIA
CA3	Bear Creek - San Joaquin
CC	Cache Creek
CC4	Middle Creek Project
CC5	Scotts Creek (Lake Port Lake)
CC6	Clear Lake/Cache Creek
CO	Coyote Creek (Santa Clara

CI	CALIFORNIA
	County)
COR	Corte Madera Creek
DE	Delta
DE3	Bouldin Island Levee Investigations
DE4	Walnut Creek
EEL	Eel River (Near Fortuna)
FE	Feather River Basin
GR	Guadalupe River
KE	Kern River
KE1	Isabella Lake
KI	Kings River
KI2	Pine Flat Dam & Lake
KT	Kaweah - Tule River Basin
KT1	Success Dam & Lake
KT2	Terminus Dam & Lake Kaweah
ME	Merced Stream Group
ME1	Mariposa Project
ME2	Owens Creek Project
ME3	Burns Dam & Lake
ME4	Bear Creek Lake
ME5	Miles Dam & Lake
ME6	Diversion Channel
ME7	Horseshoe Dam & Lake
ME8	Black Rascal Dam & Lake
ME9	New Exchequer Dam
ME10	Virginia Point Dam
ME11	Bagby Dam & Lake
ME12	Castle Dam & Lake
ME13	Haystack Dam & Lake
ME14	Margarita Dam & Lake
MO	Mokelumne River Basin
MO1	Sloughhouse-Nashville Reservoir
MO3	Ione Dam & Lake
MO4	Pardee Dam & Lake
MO5	Michigan Bar Dam & Lake
MO6	Latrobe Dam & Lake
MO7	Carson Creek School Dam & Lake
MO8	Clement, Bear Dam & Lake
MO9	Hutson School Dam & Lake

CI	CALIFORNIA
MO10	Camache Dam & Lake
NA	Napa River (Sonoma County)
PA	River (UVAS-Carnadero Creek)
PC	Putah Creek
PC1	Monticello Dam - Lake Berryessa
RU	Russian River
RU1	Coyote Dam - Lake Mendocino
RU2	Warm Spring Dam - Lake Sonoma
SA	Sacramento River Basin
SA1	Iron Canyon Dam
SA12	Cherokee Canal
SA13	Tehama-Dutch Gulch, Tehama Lake
SA17	Shasta Lake
SA18	Dutch Gulch-Gas Point, Cottonwood Creek
SA19	Tehama Dam, Farquhar School Dam, Cottonwood Creek
SA20	Morrison Creek (Vine Yard Reservoir)
SASJ	Sacramento-San Joaquin Valley Project
SC	Stony Creek Project
SC1	Black Butte Dam & Lake
SC2	Mill Site
SJ	San Joaquin River
SJ1	Big Dry Creek Dam & Lake
SJ3	Windy Gas Reservoir
SJ4	Eastman Lake - Buchanan Dam
SJ6	Long Ridge Dam & Lake
SJ7	Hensley Lake - Hidden Dam
SJ9	Fresno River Slough - Basin
SJ10	Sycamore Creek Project
SJ11	Red Bank & Fancher Creek (Big Dry Creek Dam/Lake)
SJR	San Juan River Basin
SL1	San Lorenzo River
ST	Stanislaus River
ST1	New Melones Dam & Lake
TL	Tulare County
TL1	Tule Lake Levee

CI	CALIFORNIA
TR	Truckee River (Cal-Nev)
TR1	Wingfield Park
TR4	Martis Creek Dam & Lake
TU	Tuolumne River
TU1	Don Pedro Dam & Lake
TU2	Cherry Valley Dam
WSP	Wildcat & San Pablo Creeks
YU	Yuba River
YU1	Bullards Bar Dam & Lake
TU4	Marysville Lake

Table 3 Civil Indicators - Nevada

CI	NEVADA
NEV	Nevada Projects
WA	Walker River

Table 4 Civil Indicators - Utah

CI	UTAH
JO	Jordan River
JO2	Spanish Fork
JO3	Little Dell Dam & Lake
SE	Sevier River
SLA	Salt Lake Basin
WE	Weber River & Tributaries

Table 5 Civil Indicators - Others

CI	OTHERS
DOEW	Dept. of Energy - Western Area Power Admin.
NPS	National Park Service

Table 6 Numerical Listing

CI	Location
1	American River
2	Bear River
3	Calaveras River
4	Feather River

CI	Location
5	Mokelumne River
6	Sacramento River
7	San Joaquin River
8	Yuba River
9	Lake Tahoe
10	Vietnam
11	Gunnison River, CO
12	Colorado River
13	Green River, ??
14	Smith Fork, WY
15	Coal Creek, UT
16	Logan River, UT
17	Bitter Creek, WY
18	Mill Creek, UT
19	Park Creek, UT
20	San Juan River, CO
21	La Plata River, CO & NM
22	Fortification Creek, CO
23	Little Snake River, WY
24	Animas River, CO & NM
25	Dolores River, CO
26	Silver Creek, CO
27	Duchesne River, UT
28	Dry Creek, CO
29	Roaring Fork River, CO
30	Frying Pan River, CO
31	Killpecker Creek, ??
32	White River, UT
50	Sacramento River (Bank Protection Projects)
51	Stockton Deep Water Ship Channel
52	Sacramento Deep Water Ship Channel
80	Civil Standards
81	Equipment
84	U.G.E.T. (?)
85	Real Estate Civil - San Francisco
86	Bryte Yard & Miscellaneous

SPK CIVIL FILE DIVISION

The CIVIL FILE DIVISION – RIVERS, HARBORS AND DAMS characters are listed in Table 7 and indicate the nature of work.

Table 7 Civil File Divisions - Rivers, Harbors and Dams

1	Borings, Logs of Explorations
2	Bridges, Ferries, Crossings
3	Cut-Offs, Bypasses, New Channels
4	Levees, Embankments, Training Walls, Wingdams, Retards Revetments, Bank Protection
5	Location of Bridges, Ferries, Sunken Barges, Lights, Buoys, Railroads, and Highways
6	Dredging, Excavation Clearings
7	Gold Dredging
8	Harbor Lines, Waterfronts
9	Dams, Recreation Weirs, Jetties, Docks, Outfall Gates, Reservoirs and Reservoir Sites
10	Profiles, Cross Sections
11	Progress Maps or Curves
12	Rights of Way (R. E.)
13	Surveys, Topographic and General Maps
14	Soundings, Depth Lines
15	Wharves, Bulkheads, Landings, Warehouses
16	Reclamation, Irrigation and Drainage Districts
17	Flood Plan Maps
18	Photo-Air Maps
19	Flooded Areas, Damaged by Floods
20	Reports – D. M., Master Plan
22	Topography
24	Orientation Map
25	Miscellaneous
26	Hydrographs
28	HTRW Aspects

Model File Names

The format for model file names is shown in Figure 1. All of the characters must be used.

Project Code

The Project Code is described above.

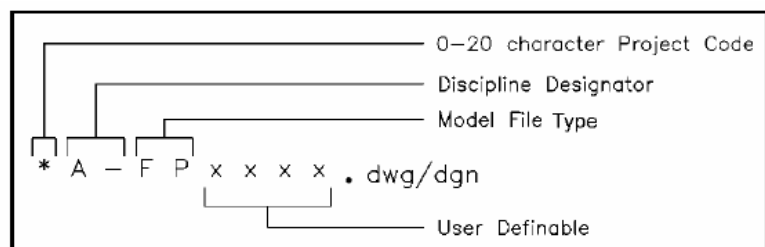


Figure 1 Model File Names

Discipline Designator

The first character of the Discipline Designator (DD) will be selected from the following table (A/E/C CADD Standard Table 2-1):

Table 8 Discipline Designator

Discipline	DD	Discipline	DD	Discipline	DD
General	G-	Architectural	A-	Electrical	E-
Hazardous Materials	H-	Interiors	I-	Telecommunications	T-
Survey/Mapping	V-	Equipment	Q-	Resource	R-
Geotechnical	B-	Fire Protection	F-	Other Disciplines	X-
Civil	C-	Plumbing	P-	Contractor/Shop	Z-
Landscape	L-	Process	D-	Drawings	
Structural	S-	Mechanical	M-	Operations	O-

The second character of the Discipline Designator is always a hyphen.

Model File Type

The model file type is from Table 2-2 of the A/E/C CADD Standard, a portion of which is included in the following tables:

Table 9 General Discipline Code Definitions

Code	Definition
BS	Border Sheet
CS	Cover Sheet
KP	Keyplan

Table 10 Hazardous Materials Discipline Code Definitions

Code	Definition
DT	Detail
EL	Elevation
LG	Legend
PP	Pollution Prevention Plan
QP	Equipment Plan
SC	Section
XD	Existing/Demolition Plan

Table 11 Survey/Mapping Discipline Code Definitions

Code	Definition
AL	Existing Airfield Lighting Plan
CP	Existing Communication System Plan
EU	Existing Electrical Utilities Plan
HP	Existing Hydrographic Survey Plan
HT	Existing HTCW Utilities Plan
LG	Legend
PB	Property Boundary
PR	Existing Profile
SC	Existing Section
SP	Survey and Mapping Plan
UP	Existing Utilities Plan

Table 12 Geotechnical Discipline Code Definitions

Code	Definition
DT	Detail
JP	Joint Layout Plan
LB	Boring Log
LG	Legend
PV	Pavement Site Plan
SC	Section
SH	Schedule
SI	Subsurface Investigation Plan

Table 14 Landscape Discipline Code Definitions

Code	Definition
DT	Detail
EL	Elevation
IP	Irrigation Plan
LG	Legend
LP	Landscape Plan
SC	Section
SH	Schedule
XD	Existing/Demolition Plan

Table 13 Civil Discipline Code Definitions

Code	Definition
AF	Airfield Plan
BR	Beach Renourishment Plan
DT	Detail
EL	Elevation
ER	Eco-Restoration Plan
FC	Flood Control Plan
GP	Grading Plan
IP	Installation Plan/Base Map
JP	Joint Layout Plan
KP	Staking Plan
LG	Legend
NG	Navigation/Dredging Plan
PL	Project Location Map
PR	Profile
SC	Section
SH	Schedule
SP	Site Plan
TS	Transportation Site Plan
UP	Utilities Plan
XD	Existing/Demolition Plan

Table 15 Structural Discipline Code Definitions

Code	Definition
3D	Isometric/3D
BP	Bridge Plan
CP	Column Plan
CW	Misc. Small Civil Works Structures
DT	Detail
EL	Elevation
EP	Enlarged Plan
FC	Flood Control Structures
FP	Framing Plan
LD	Locks and Dams
LG	Legend
NP	Foundation Plan
SC	Section
SH	Schedule
XD	Existing/Demolition Plan

Discipline codes for Architectural, Interiors, Fire Protection, Plumbing, Mechanical, Electrical, and Telecommunications are shown in the A/E/C CADD Standard.

User Definable

The last four required characters are user defined. If the user does not define these they should remain XXXX.

Sheet File Names

The format for sheet file names is shown in Figure 2.

Project Code

The Project Code will be the same contract file name used for model files.

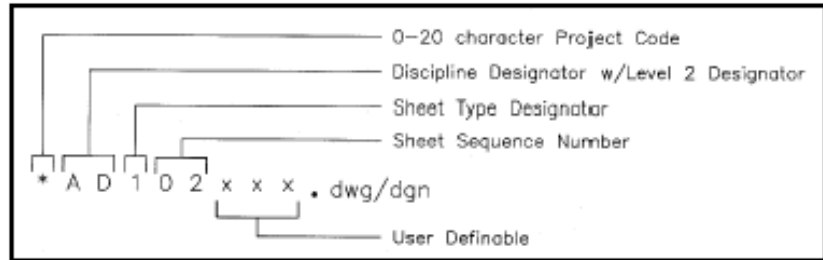


Figure 2 Sheet File Names

Discipline Designator

The Discipline Designator will be selected from the following table, which is a portion of Table 2-3 of the A/E/C CADD Standard.

Table 16 General Discipline Designator

Designator	Description	Content
G-	All General	All or any portion of subjects in the following Level 2 Designators
GI	General Informational	Drawing index, code summary, symbol legend, orientation maps
GC	General Contractual	Phasing, schedules, contractor staging areas, fencing, haul routes, erosion control, temporary and special requirements
GR	General Resource	Photographs, soil borings

Table 17 Survey/Mapping Discipline Designator

Designator	Description	Content
V-	All Survey/- Mapping	All or any portion of subjects in the following Level 2 Designators
VA	Aerial Survey	
VF	Field Survey	
VH	Hydrographic Survey	
VI	Digital Survey	
VU	Combined Utilities	

Table 18 Geotechnical Discipline Designator

Designator	Description	Content
B-	All Geotechnical	All or any portion of subjects in the following Level 2 Designators

Table 19 Civil Discipline Designator

Designator	Description	Content
C-	All Civil	All or any portion of subjects in the following Level 2 Designators
CB	Civil Beach Renourishment	Beach Disposal and Renourishment
CD	Civil Demolition	Structure removal and site clearing
CE	Civil Ecosystem Restoration	Environmental Restoration
CF	Civil Flood Control	Levees, spillways, pump stations
CG	Civil Grading	Excavation, grading , drainage, erosion control, retention ponds
CI	Civil Improvements	Pavers, flagstone, exterior tile, furnishings, retaining walls, and water features
CN	Civil Navigation	Navigation, harbors, dredging
CO	Civil Operation and Maintenance	Repair and upgrade to O&M structures
CP	Civil Paving	Roads, driveways, parking lots
CH	Civil Shore Protection	Erosion protection structures one shoreline
CR	Civil Recreation	Recreation facilities
CS	Civil Site	Plats, topographic, dimension control
CX	Civil Security	Security-related work
CT	Civil Transportation	Waterways, wharves, docks, trams, railways, airfields, and peplemovers
CU	Civil Utilities	Water, sanitary sewer, storm sewer, power, communications, fiber optic, telephone, cable television, natural gas, and steam systems

Table 20 Landscape Discipline Designator

Designator	Description	Content
L-	All Landscape	All or any portion of subjects in the following Level 2 Designators
LD	Landscape Demolition	Protection and removal of existing landscaping
LI	Landscape Irrigation	
LP	Landscape Planting	

Table 21 Structural Discipline Designator

Designator	Description	Content
S-	All Structural	All or any portion of subjects in the following Level 2 Designators
SD	Structural Demolition	Protection and removal
SS	Structural Site	
SB	Structural Substructure	Foundations, piers, slabs, and retaining walls
SF	Structural Framing	Floors and roofs

Discipline codes for Hazardous Materials, Architectural, Interiors, Equipment, Fire Protection, Plumbing, Process, Mechanical, Electrical, Telecommunications, Resource, Other Disciplines, Contractor/Shop Drawings, and Operations are shown in the A/E/C CADD Standard.

Sheet Type Designator

The Sheet Type Designator will be selected from the following table, which is a copy of Table 2-4 in the A/E/C CADD Standard:

Table 22 Sheet Type Designator

Sheet Type	Designator
General (symbols legend, notes, etc.)	0
Plans (horizontal views, small scale)	1
Elevations (vertical views, small scale)	2
Sections (sectional views, small scale)	3
Large Scale Views (plans, elevations, or sections that are not details)	4
Details	5
Schedules and Diagrams	6
User Defined	7
User Defined	8
3D Representations (isometrics, perspectives, photographs)	9

Scales are generally divided into two categories. Small-scale drawing shows less detail of a greater land area while a large-scale drawing shows a small land area in great detail. A large-scale drawing is an enlargement of a small-scale drawing.

Sheet Sequence Number

The next two characters are for the Sheet Sequence Number and the remaining three characters are user-definable. If the sheet sequence number goes above 99 sheets, the first character in the User Definable field may be used.

Examples

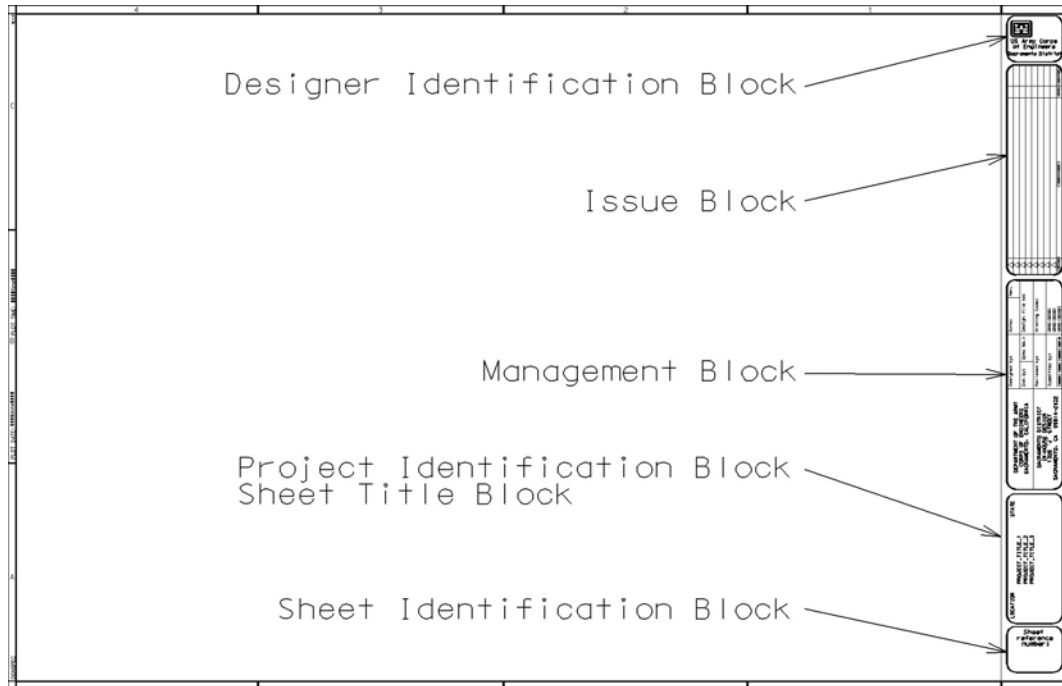


Figure 3 Sample drawing sheet with vertical title block

Napa contract 2 East has a Project Code of NA-04-015. A civil sheet file (C-), that contains a plan (1), with civil sequence number, (01), and user defined characters not defined, has a sheet file name of NA-04-015C-101XXX.DGN

For a contract on Folsom Dam and Lake, the electronic sheet file name for a structural cross section would be: AM1-99S-310914.dwg for sheet sequence number '10' and user definable characters '914'.

A project on the Truckee River has a Project Code of TR-19-208 and a model file that contains profiles for Alternate 3 would be named TR-19-208C-PR3XXX.dgn. In this example the first user definable character is a 3 to designate the Alternative and the remaining three user definable characters are not used.

Standard Border Files

MicroStation

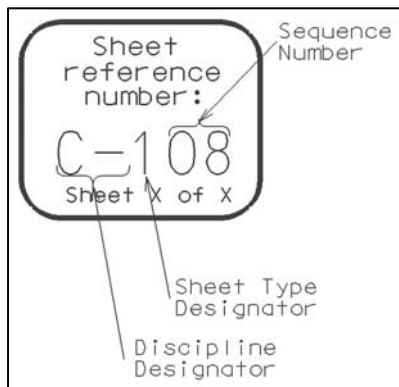
The current Standard Border Files for MicroStation users are available from the page at [SPK MicroStation Standards \[http://www.spk.usace.army.mil/organizations/cespk-ed/SPKCADD/MicroStation/microstation.html\]](http://www.spk.usace.army.mil/organizations/cespk-ed/SPKCADD/MicroStation/microstation.html) or in the LAN folder [\[\\diamond\\ustation\\borders\\MSV8\]](#). Cover sheets are G-CSxxx.f.dgn, and G-CSxxxm.dgn for

imperial and metric projects respectfully. The General Border Sheet G-BSxxxx.dgn is used for both imperial and metric projects. Instructions for use are in notes in the files.

AutoCAD

The current Standard Border Sheets for AutoCAD users are available on the page at [SPK AutoCAD Standards](http://www.spk.usace.army.mil/organizations/cespk-ed/SPKCADD/AutoCAD/autocad.html) [<http://www.spk.usace.army.mil/organizations/cespk-ed/SPKCADD/AutoCAD/autocad.html>] or in the LAN folder [\\Arsenic\\milcad\\Acadcust.r2k\\Borders]. Both imperial and metric Standard Border Sheets are available. Copy the appropriate ones for your project.

Title Block Information



The Sheet Identification Block is made up of the Discipline Designator, Sheet Type Designator, and the Sheet Sequence Number as shown in Figure 4 at left.

The Project Information Block/Sheet Title Block is discipline determined and as shown in Figure 5 below:

COUNTY	STATE
PROJECT INFORMATION LINE 2	
LINE 3	
LINE 4	
SHEET TITLE LINE 1	
LINE 2	
LINE 3	

Figure 4 Sheet Identification Block

The Management Block is shown in Figure 6 below.

Figure 5 Project Information Block/Sheet Title Block

DEPARTMENT OF THE ARMY CORPS OF ENGINEERS SACRAMENTO, CALIFORNIA	Designed by:		Date:	Rev.
	Dwn by:	Spec No.:	Design file no:	
SACRAMENTO DISTRICT IN-HOUSE DESIGN 1325 'J' STREET SACRAMENTO, CA 95814-2922	Reviewed by:		Drawing Code:	
	Submitted by:		File name:	
	CHIEF, CIVIL DESIGN SEC A		Plot date:	
				Plot scale:

Figure 6 The Management Block

Sheet Order

As far as the sequence of the discipline designators in a drawing set, the National CAD Standard mandates that the disciplines follow the order as shown in A/E/C CADD Standard Table 2-1 which is reproduced as Table 8 Discipline Designator in this convention.